

PUBLIC SERVICE COMMISSION OF WISCONSIN

2019-2023 Focus on Energy Evaluation Contract

9501-FE-124

FINAL DECISION

This is the Final Decision on the proposal to conduct a potential study that would assess the amount of solar photovoltaic (PV) power generation that could be achieved through programs offered by Focus on Energy (Focus).

Background

Focus operates certain programs designed to encourage the adoption of solar PV systems to utility business and residential customers looking to lower their energy bills, reduce their carbon footprint, and gain energy independence. Technologies and market conditions for solar PV are continuously changing, affecting the measure's cost-effectiveness and economic benefits for consumers. The last time Focus completed a potential study that incorporated renewable energy, such as solar PV, to assess statewide savings potential was in 2009, more than a decade ago.

The Commission approved funding of energy efficiency potential studies in support of both the Quadrennial Planning Process III (QPP III, 2019-2022) and Quadrennial Planning Process IV (QPP IV, 2023-2026) under its contract with the Cadmus Group (Cadmus) as the third party evaluator for Focus. ([PSC REF#: 284910](#) and [PSC REF#: 370599](#).) Goals of these studies include collecting up-to-date information on energy efficiency technologies and market conditions and identifying new programmatic opportunities to inform planning and goal setting

for the ensuing Focus quadrennium. The QPP IV energy efficiency potential study kicked off in the spring of 2020 and is modeled as an update to the QPP III energy efficiency potential study.

During the stakeholder engagement process for the QPP IV energy efficiency potential study, a number of stakeholders noted the absence of an analysis of renewable energy measures, specifically solar PV, as a shortcoming of the study's scope. Stakeholders noted the rapid evolution of the customer-owned solar PV market, shifting social tastes and preferences for adopting solar PV, state and local government initiatives to reduce carbon emissions, and the unique profile of benefits the measure generates as reasons in support of studying solar PV potential in advance of the Commission's scope determinations for QPP IV.

Commission staff worked with Cadmus and consulted Focus staff and outside experts in the renewable energy field to develop a proposal for a solar PV potential study. Additionally, Commission staff consulted with APTIM, the Focus Program Administrator, to identify an available source of funds to support a solar PV potential study. Commission staff prepared a memorandum summarizing the proposal and funding alternatives. Comments on the memorandum were solicited and received from several members of the public and organizations. The Commission reviewed this matter at its open meeting of February 11, 2021.

Findings of Fact

1. It is reasonable and in the public interest to conduct a potential study to assess the amount of future solar PV power generation that can be cost-effectively achieved through Focus' renewable energy efficiency programs.
2. It is reasonable that the costs associated with the solar PV potential study paid by Focus shall not exceed \$181,017.

3. It is reasonable to fund the solar PV potential study using funds from the Economic Research and Development (EERD) program.

Conclusions of Law

1. The Commission has jurisdiction under Wis. Stat. §§ 196.02, 196.374, 196.395 and Wis. Admin. Code ch. PSC 137 to set and revise the goals, priorities, and measurable targets for Focus and to take all other actions necessary relating to the Commission's oversight of Focus.

2. The Commission may impose any term, condition, or requirement necessary to protect the public interest pursuant to Wis. Stat. §§ 196.02, 196.374, and 196.395.

Opinion

The Commission is statutorily obligated to oversee Wisconsin's statewide energy efficiency and renewable resource programs, known as Focus on Energy (Focus). Wis. Stat. § 196.374(3)(a). The Commission has overseen Focus since 2007 and during this time has continually monitored and adjusted the programs, goals, priorities, and measurable targets to ensure that Focus meets the core statutory goals set forth in Wis. Stat. § 196.374. The evaluation of technical and complex program proposals and the budget necessary to achieve the statutory goals of Focus is an area in which the Commission has special expertise. In overseeing Focus and fulfilling these statutory obligations, the Commission exercises its authority vested by the Legislature to determine the appropriate programmatic structure and allocation of funds under Wis. Stat. § 196.374 and sets policies that reflect the changing nature of the utility and renewable and energy efficiency industries.

Solar PV Potential Study

The initiation, funding, and approval of potential studies, for energy efficiency and renewable energy programs, including the solar PV potential study, is in accordance with the Commission's authority under Wis. Stat. § 196.374 and Wis. Admin. Code ch. PSC 137.05(7). Potential studies are utilized in energy efficiency and renewable energy programs to collect up-to-date information on market conditions, assess the amount of future savings that can be realistically attained, and provide information on which technologies and customer segments could be targeted to maximize savings achievement and program cost-effectiveness. The Commission has approved energy efficiency potential studies in support of quadrennial planning for both Quadrennium III (2019-2022) and Quadrennium IV (2023-2026) of Focus. ([PSC REF#: 284910](#) and [PSC REF#: 370599](#).) However, the Commission has not completed a potential study on renewable energy programs since 2009. Similar to the energy efficiency potential studies approved by the Commission, the solar PV potential study will develop research to support and enhance the effective delivery of statewide programs. In the Commission's quadrennial planning, which includes setting program goals and budget allocations, the Commission has historically determined, among other items, an annual budget allocation for renewables. In setting these budget allocations and goals, it is reasonable for the Commission to rely upon a study of the potential effectiveness of measures under various circumstances and at varying levels. Similar to energy efficiency studies, the Commission finds that data gained from the solar PV potential study will inform the upcoming quadrennial planning process and assist in determining the most cost-effective measures, benefiting ratepayers in Wisconsin. Furthermore, the Commission recognizes that a statewide study of solar PV potential will serve as a useful

resource in informing the future design and delivery of Focus renewable energy programs. The fact that Focus' solar programs remain in high demand is not a reason to forego this potential study. To the contrary – it underscores why a solar PV potential study is particularly important as it will help identify and ensure that these popular programs are designed in the most cost-effective manner that maximize savings achievement. Moreover, the study's comparison of solar PV installation cost-effectiveness to energy efficiency measures will provide useful information to the Commission in its determination of budget allocation for Focus program as a whole.

Commission staff, in consultation with Focus program staff and outside solar PV experts identified key scope criteria that would optimize the value of a Focus solar PV potential study:

1. Integration with existing Focus evaluation resources.
2. Study analysis and results presented at sub-state geographic resolution.
3. A robust stakeholder engagement process.
4. Segmented market adoption analysis of low-income customers.
5. Ability to inform quadrennial planning decisions.

Commission staff worked with Cadmus to develop a study scope and budget that reflects these criteria.

The Commission finds that it is reasonable and within the public interest to amend its contract with Cadmus to perform the solar PV potential study and approves reallocating \$181,017 from the EERD Program budget to the Evaluator contract to fund the solar PV potential study as modified by the Commission. Contracting with Cadmus allows for an effective integration of an established administrative structure for coordinating study data collection and analysis as well as stakeholder engagement efforts. Further, this integration

allows for a direct link to the energy efficiency potential study and other ongoing evaluation work and program activities, which include evaluation of savings, cost-effectiveness, and freeridership for Focus programs and offerings designed to facilitate the adoption of solar PV. As part of the study, Cadmus will examine market potential amid changing economic attractiveness metrics including electric rates, system costs, incentives (e.g., tax credits, Focus incentives), financing options, and system efficiency.

The Commission finds that it is reasonable to approve a solar PV potential study scope that reports results by county as well as for each investor owned utility (IOU) and also aggregated results for publicly owned utilities. The Commission finds that reporting of results at multiple sub-state geographies is useful to support program planning and inform other efforts related to solar PV adoption throughout the state.

In lieu of staff's proposed online representative panel research task, the Commission finds it reasonable to modify the proposed scope of work and authorize up to \$12,209 to be spent on other research, such as a literature search and/or demonstration project review, in support of informing estimates of solar PV potential and to characterize solar PV adoption barriers for the low-income population in Wisconsin. The Commission finds that information gained from the literature review and/or demonstration project review will further strengthen the study's ability to support Commission decision making aimed at engaging the state's low-income population in Focus' renewable energy programs. The table below shows the study tasks and budgets as approved by the Commission.

Task	Approved Study Scope Budget
1. Technical Potential	\$38,020
2. Market Potential	\$42,800
3. Qualitative Research	\$7,192
4. Cost-Effectiveness Comparison	\$6,438
5. Stakeholder Engagement	\$16,142
6. Reporting	\$28,256
7. Project Management	\$16,780
8. County & Utility Results	\$13,180
9. Literature Search and/or Demonstration Project Review to Characterize Adoption Barriers for the Low-Income Population in Wisconsin	\$12,209
Total Not To Exceed	\$181,017

Order

1. The Commission shall amend its 2019-2023 Focus evaluation contract with Cadmus to add a solar PV potential study to the contract scope of work. The scope of work for the solar PV potential study shall reflect the proposal as modified by this Final Decision.

2. The solar PV potential study shall report solar PV potential results by county, by Investor Owned Utility territory, and aggregated results for publicly owned utilities.

3. The solar PV potential study scope shall include a literature review and/or demonstration project review up to \$12,209 to characterize solar PV adoption barriers for the low-income population in Wisconsin.

4. The costs associated with the solar PV potential study paid by Focus shall not exceed \$181,017.

5. The Commission, having consulted with SEERA, shall amend the 2019-2022 Focus Program Administrator contract with APTIM to subtract the authorized solar PV potential study budget amount of \$181,017 from the EERD Program budget.

6. Jurisdiction is retained.

Dissent

Commissioner Nowak dissents and writes separately.

Dated at Madison, Wisconsin, the 10th day of March, 2021.

By the Commission:

A handwritten signature in black ink that reads "Steffany Powell Coker". The signature is written in a cursive, flowing style.

Steffany Powell Coker
Secretary to the Commission

SPC:pc:kle:jac DL:01782692

See attached Notice of Rights

PUBLIC SERVICE COMMISSION OF WISCONSIN
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**NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE
TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE
PARTY TO BE NAMED AS RESPONDENT**

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.¹ The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

¹ See *Currier v. Wisconsin Dep't of Revenue*, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

PUBLIC SERVICE COMMISSION OF WISCONSIN

2019-2023 Focus on Energy Evaluation Contract

9501-FE-124

DISSENT OF COMMISSIONER ELLEN NOWAK

I dissent from the Commission's decision to amend its existing 2019-2023 Focus on Energy evaluation contract with Cadmus to add a solar photovoltaic (PV) potential study to its contract scope and reallocate funds within Focus to support the study. (Docket 9501-FE-101).

This decision is nothing more than a gift to private solar installers and developers fully funded by Wisconsin ratepayers. Conducting a study on the undisputed growth in solar PV is the epitome of the waste of ratepayer dollars. As the Commission staff memo notes, solar PV represents the most utilized renewable energy technology currently incentivized through Focus and projections indicate that demand for customer-sited rooftop solar will remain high in 2021. ([PSC REF#: 403232](#).) Indeed, according to the Focus administrator, the Commission's decision to reduce residential solar PV financial incentives from \$1,500 to \$500 has not slowed customer demand. In fact, according to Commission staff, every installer in the state is working at full capacity and expects backlogs extending well into 2021¹. (*Id.*)

Armed with this information, the Commission chose a path that defies financial logic. Rather than reevaluate whether financial incentives are even necessary (they clearly are not), the Commission chose to spend *more* ratepayer funds to study the potential for more solar PV in the state. Stunningly, the undisputed information about the popularity of residential solar PV had no

¹ The Commission's decision to spend nearly \$168,000 (cost of study plus online representative panel survey research) is at odds with the waiting list and demand for incentives. The cost of the study will reduce the number of \$500 grants by 335.

impact on the Commission's decision to spend money determining the popularity of residential solar PV.

Without question, the largest beneficiaries of this ratepayer-funded study are private solar installers. The Commission will now provide them with a roadmap of where to best market their product. Thus, it was not a shock when the Commission memo noted that stakeholders in the renewable energy industry supported the potential study. They are not to blame. When asked if they would like a government-funded study to help their business grow, why wouldn't they agree? In overseeing the Focus program, this Commission has a clear duty to utilize ratepayer dollars for the benefit of Wisconsin ratepayers. By funding this study, this Commission has failed in this duty.

The Commission must also be cautious about proceeding down a path that could create the false impression that rooftop solar (the most expensive solar resource) is a viable alternative to other transmission and generation projects, including utility scale solar. It is unclear to me what the Commission intends to do with the information once it is gathered. Will it be used to pick winners and losers? Will the Commission use the information to help market rooftop solar at the expense of other renewable options (including other solar options)? It is not the Commission's role to promote one type of resource over another, particularly when one of the resources is competitive in the free market. As aptly noted by the Wisconsin Utilities Association in its comments on this docket, "the proposed study is not likely to yield critical information pertinent to improving the effectiveness of [Focus] incentive dollars." ([PSC REF#: 404256.](#))

Even as an analysis of the potential of rooftop solar, this study misses the mark. To determine the potential for rooftop solar (currently installed on fewer than 7,000 Wisconsin rooftops) by calculating the square footage of the millions of rooftops in the state is like measuring the capacity of Lake Michigan to decide if you can have a glass of water. We are a long way from having to worry about the number of rooftops limiting solar installations.

The study will include an analysis of the barriers to PV adoption by low-income customers. I proposed that the study include an analysis of the cost effectiveness of utility scale solar and private solar for low-income households. It is unclear to me if this proposal was agreed to but I hope that it is done in order to obtain a fair analysis of the cost.

One additional caution for the Commission, the line between taking dollars from ratepayers for the specific benefit of those ratepayers and taxing those ratepayers by taking their money for the benefit a specific industry or policy purpose is a thin one. The Focus program has always justified its existence based on the opportunity it provides for all ratepayers to receive concrete financial benefits from the program that offset the cost. This study fails to provide that opportunity for those paying the cost to benefit directly and uses ratepayer dollars to provide data private industry has every incentive to develop themselves. This study veers Focus in the direction of a 2 percent tax on ratepayers that deserves legislative scrutiny.

Because it is unclear how this study will assist the Commission in prioritizing Focus dollars between renewable and energy efficiency measures and appears primarily to benefit private developers, I dissent.